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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,647	08/07/2001	Hiroyuki Takahashi	35.C15654	9232

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EXAMINER

PENDERGRASS, KYLE M

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,647

Applicant(s)

TAKAHASHI, HIROYUKI

Examiner

Kyle M Pendergrass

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6 & 8-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "said developing means" in page 41, lines 23. There is insufficient antecedent basis for this limitation in the claim. Examiner realizes Applicant's intention to reflect the "means for developing" as disclosed in claim 6, page 41, line 20, but requests the "means for developing" be changed to "*developing* means for developing" so "said developing means" remains antecedently consistent in claim 6.

Regarding claims 8-13, Applicant claims a "first color image output apparatus" and a "second color image output apparatus". Please clarify whether the image output apparatuses are color apparatuses and are being distinguish between first and second, or if each apparatus is being distinguished between first color and second color.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-13 are rejected under 35 U.S.C. 102(e) as being anticipated by KATO (US 6 738 151).

Regarding claim 1, **KATO** teaches an image processing method (*fig 1, distributed processing server 104*) for processing an input job (*fig 2, print data 200*) in parallel (*fig 17, & column 10:lines 54-60, print data is processed at printers 10a and 10n in parallel*) by a plurality of color image output apparatus (*fig 1, color copiers/printers 102 & 103*), comprising:

a developing step of developing input image data into bit map image data (*column 7:lines 63-65, page buffer 204 develops PDL into bit map form*),

wherein said developing step includes first and second modes (*figs 9 & 10, print driver screen and/or control panel screen provides three modes that are available for sending page data developed in the page buffer to color image output apparatuses 102 and 103. The modes are: 1) column 9:lines 23-24: tandem print/image quality small difference mode; 2) column 10:line 22: tandem print/high picture quality mode; column 10:line 66: tandem print/monochrome and color allocation mode*,

wherein the first mode develops the input image data by using a color processing condition corresponding to each of the plurality of color image output apparatus (*see fig 12 and column 10:lines 21-64 for specifics of first mode: tandem print/high picture quality mode that outputs data to plurality of apparatuses 102 & 103 using a specified color processing condition*), and wherein the second mode develops the input image data by using an optional color processing condition and outputs a result obtained by said developing means to the plurality of color image output apparatus (*see fig 13 and column 10:line 65 – column 11:line 41 for specifics of second mode: tandem print/monochrome and color allocation mode that outputs data to plurality of apparatuses 102 & 103 using an optional*

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condition. Also, the optional color processing condition may be the tandem print/image quality small difference mode).

Regarding claim 2, **KATO** teaches an image processing method according to claim 1, wherein the optional color processing condition is a color processing condition corresponding to one of the plurality of color image output apparatus (*column 11:lines 4-41, when mode 2 is selected, it is a condition corresponding to either one of the capabilities of the two printers, i.e. the print system is capable of monochrome when it otherwise is not, which is a condition corresponding to one of the printers and used to provide monochrome features*).

Regarding claim 3, **KATO** teaches an image processing method according to claim 1, wherein the optional color processing condition is a color processing condition corresponding to a combination of the plurality of color image output apparatus (*column 11:lines 4-41, when mode 2 is selected, it is a condition corresponding to both of the printers, i.e. the print system is capable of the combination of color and monochrome printing, which are the combination of printer capabilities in the system*).

Regarding claim 4, **KATO** teaches an image processing method according to claim 3, wherein the optional color processing condition is average values of color processing conditions corresponding to the plurality of color image output apparatus (*column 9:lines 21-50, printer conditions are matched with each other, which follows Applicant's Specification in paragraph 0122 for averaging values where one printer's conditions may be used as a representative condition*).

Regarding claim 5, **KATO** teaches an image processing method according to claim 3, further comprising a distributing process of distributing the input job to the plurality of color image output apparatus, wherein the optional color processing condition is determined by performing a weighing process of the color processing condition corresponding to each of the color image output apparatus in accordance with a

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distribution condition of said distributing process (*column 5:lines 56-67, print speed is weighed for each apparatus which follows Applicant's Specification in paragraph 0137*).

Regarding claim 7, **KATO** teaches a storage medium storing a program for realizing an image processing method taught in claim 1 (*column 7:lines 12-13, 24, & 40-46, a hard drive stores the control program, client has document program and API carries out the data communication for the program stored in the system*).

Regarding claim 8, **KATO** teaches an image processing method (*fig 1, distributed processing server 104*) for processing an input job (*fig 2, print data 200*) in parallel (*fig 17, & column 10:lines 54-60, print data is processed at printers 10a and 10n in parallel*) by a plurality of color image output apparatus (*fig 1, color copiers/printers 102 & 103*), comprising:

a developing step for developing input image data into bit map image data for a first color image output apparatus (*figs 1 & 2 & column 7:lines 63-65, PDL data is converted to bit map form for printing in an image output apparatus 102 or 103*);

and converting step (*fig 2, page buffer 204*) of converting the bit map image data for the first color image output apparatus into bit map image data for a second color image output apparatus (*column 7:line 63 – column 8:line 4, page buffer 204 develops PDL data for the first printing apparatus. Column 11:lines 29-33, monochrome pages have been converted from the original PDL data for printing on the first apparatus and are converted to data for the monochrome apparatus*),

wherein the bit map image data for the first color image output apparatus developed by said developing means is transferred to the first color image output apparatus, and wherein the bit map image data for the second color image output apparatus converted by said converting step is transferred to the second color image output apparatus (*column 11:lines 29-33, page data is transmitted to each printer*).

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Regarding claim 9, **KATO** teaches an image processing method according to claim 8, wherein the plurality of color image output apparatus are of the same type (*column 9:lines 34, printers 102 and 103 are both color printers*), and said developing step performs a color matching process by using profiles corresponding to the type of the plurality of color image output apparatus, and wherein said converting step performs a conversion matching gradation characteristics of the first and second color image output apparatus (*column 9:lines 21-50, printer conditions are matched with each other, which follows Applicant's Specification in paragraph 0122 for averaging values where one printer's conditions may be used as a representative condition*).

Regarding claim 10, **KATO** teaches an image processing method according to claim 9, wherein the gradation characteristics of the first color image output apparatus are calibrated by a calibration process (*column 9:lines 45-50, printer 1 is calibrated*).

Regarding claim 11, **KATO** teaches an image processing method according to claim 8, wherein said developing step performs a color adjustment process corresponding to the first color image output apparatus and a gradation correction process matching the first color image output apparatus (*column 9:lines 21-50, gradation of first apparatus is matched to second apparatus, wherein the matching is an adjustment process*).

Regarding claim 12, **KATO** teaches an image processing apparatus (*fig 1, distributed processing server 104*) for processing an input job (*fig 2, print data 200*) in parallel (*fig 17, & column 10:lines 54-60, print data is processed at printers 10a and 10n in parallel*) by a plurality of color image output apparatus (*fig 1, color copiers/printers 102 & 103*), comprising:

developing means for developing input image data into bit map image data for a first color image output apparatus (*figs 1 & 2 & column 7:lines 63-65, PDL data is converted to bit map form for printing in an image output apparatus 102 or 103, which requires a developing means for developing the PDL data into bit map form*);

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and converting means (*fig 2, page buffer 204*) for converting the bit map image data for the first color image output apparatus into bit map image data for a second color image output apparatus (*column 7:line 63 – column8:line 4, page buffer 204 develops PDL dat for the first printing apparatus. Column 11:lines 29-33, monochrome pages have been converted from the original PDL data for printing on the first apparatus and are converted to data for the monochrome apparatus*),

wherein the bit map image data for the first color image output apparatus developed by said developing means is transferred to the first color image output apparatus, and wherein the bit map image data for the second color image output apparatus converted by said converting means step is transferred to the second color image output apparatus (*column 11:lines 29-33, page data is transmitted to each printer*).

Regarding claim 13, **KATO** teaches s storage medium storing a program for realizing an image processing method taught in claim 8 (*column 7:lines 12-13, 24, & 40-46, a hard rive stores the control program, client has document program and API carries out the data communication for the program stored in the system*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over KATO (US 6 738 151) & TAKAHASHI et al. (US 5 642 208).

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Regarding claim 6, **KATO** teaches an image processing apparatus (*fig 1, distributed processing server 104*) for processing an input job (*fig 2, print data 200*) in parallel (*fig 17, & column 10:lines 54-60, print data is processed at printers 10a and 10n in parallel*) by a plurality of color image output apparatus (*fig 1, color copiers/printers 102 & 103*), comprising:

means (*fig 2, page buffer 204*) for developing input image data into bit map image data (*column 7:lines 63-65*);

and selecting means (*figs 9 & 10, print driver screen and/or control panel screen*) for selecting either a first mode or a second mode in said developing means (*three modes are available for sending page data developed in the page buffer to color image output apparatuses 102 and 103. The modes are: 1) column 9:lines 23-24: tandem print/image quality small difference mode; 2) column 10:line 22: tandem print/high picture quality mode; column 10:line 66: tandem print/monochrome and color allocation mode*),

wherein the first mode develops the input image data by using a color processing condition corresponding to each of the plurality of color image output apparatus (*see fig 12 and column 10:lines 21-64 for specifics of first mode: tandem print/high picture quality mode that outputs data to plurality of apparatuses 102 & 103 using a specified color processing condition*), and wherein the second mode develops the input image data by using an optional color processing condition and outputs a result obtained by said developing means to the plurality of color image output apparatus (*see fig 13 and column 10:line 65 – column 11:line 41 for specifics of second mode: tandem print/monochrome and color allocation mode that outputs data to plurality of apparatuses 102 & 103 using an optional condition. Also, the optional color processing condition may be the tandem print/image quality small difference mode*).

KATO do not teach developing the input image data a plurality of times.

However, **TAKAHASHI et al.** teach developing the input image data a plurality of times (*column 21:lines 9-25 tandem printing wherein print data is developed a plurality of times and is sent in to a plurality of output apparatuses A-D in the process of developing it for output a plurality of times*).

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Accordingly, it would have been obvious to one skilled in the art at the time of the invention to have used the tandem copy/print function taught by **TAKAHASHI et al.** with the different modes for processing data taught by **KATO** because the tandem copy/print function taught by **TAKAHASHI et al.** ensures a high copy volume (see **TAKAHASHI et al. column 1:lines 19-21**).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle Pendergrass whose telephone number is **(571) 272-7438**. The examiner can normally be reached on Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on **(571) 272-7440**.


KING Y. POON
PRIMARY EXAMINER